WHAT IS CLAIMED IS:

1 1.   In a test system for testing an integrated circuit device, a software program that receives

2 instructions from a user and issues commands to the test system for testing the integrated circuit

3 device in accordance with the user instructions, the software program including:

4   computer program code for receiving an instruction from the user;

5   computer program code for generating a generic command based upon the user

6 instruction, the generic command being independent of the test system that is being used to test

7 the integrated circuit device;

8   computer program code for translating the generic command into a test system specific

9 command;

10   computer program code for providing the test system specific command to the test

11 system; and

12   computer program code for receiving a test result from the test system, the test result

13 being provided in response to the test system specific command and indicative of a result of a

14 test performed on the integrated circuit device.

1 2.   The software program of claim 1 wherein the computer program code for receiving an

2 instruction from the user and the computer program code for generating a generic command are

3 located in a high-level program module, the high-level program module being usable with a

4 plurality of different test systems without modification.

1 3.   The software program of claim 2 wherein the computer program code for translating the

2 generic command into a test system specific command is located in an interface software module

3 and wherein the computer program code for providing the test system specific command to the

4   test system and the computer program code for receiving a test result are located in a low-level

5   program module, wherein the interface software module and the low-level software module are

6   unique to a specific test system.

1   4.   The software program of claim 3 wherein all communications between the high-level

2   program module and the low-level program module are routed through the interface software

3   module.

1   5.   The software program of claim 3 wherein the interface software module is provided such

2   that high-level code from the high-level program module is converted to one or more low-level

3   codes that correspond to the functionality of the high-level code, and one or more low-level

4   codes from the low-level program module are converted to one or more high-level codes that

5   correspond to the functionality of the low-level code.

1   6.   The software program of claim 1 wherein the computer program code for translating the

2   generic command into a test system specific command is located in an interface software module

3   and wherein the computer program code for providing the test system specific command to the

4   test system and the computer program code for receiving a test result are located in a low-level

5   software module, wherein the interface software module and the low-level software module are

6   unique to a specific test system.

1   7.   A method for communication with a test system for integrated circuits, in which

2   commands of a high-level program are processed, and a low-level program produces test signals

3   that are transmitted to the integrated circuit to be tested, and in which reaction signals from the

4   integrated circuit are transmitted by the low-level program as reactions to the high-level

5   program, characterized in that an autonomous interface program, which is specific for the test

6   system, is provided such that one or more high-level codes are converted to one or more low-

7   level codes that correspond to the functionality of the high-level code, and one or more low-level

8   codes are converted to one or more high-level codes which correspond to the functionality of the

9   low-level code, and in that the high-level program is linked to the low-level program exclusively

10   via the interface program and the low-level program is linked to the high-level program

11   exclusively via the interface program.

1   8.   The method according to claim 7 wherein the high-level program has a supply of high-

2   level codes that are independent of the test system.

1   9.   In a test system for testing an integrated circuit device, a software program that receives

2   instructions from a user and issues commands to a test system for testing the integrated circuit

3   device in accordance with the user instructions, the test system including one or more pieces of

4   test equipment, the software program including:

5   a high-level program including:

6   computer program code for receiving a user instruction from the user; and

7   computer program code for generating a generic command based upon the user

8   instruction, the generic command being independent of the test system that is being used to test

9   the integrated circuit device;

10   a low-level program including:

11   computer program code for interfacing with the test system by providing test

12   commands to the test system and receiving test results from the test system;

13   wherein the low-level program is unique for each piece of test equipment in the

14   test system;

15   an interface program including:

16   computer program code for translating the generic command from the high-level

17   program into a test system specific command;

18   computer program code for providing the test system specific command to the

19   low-level program;

20   computer program code for receiving a test result from the low-level program, the

21   test result being indicative of a result of a test performed on the integrated circuit device based

22   on the generic command; and

23   computer program code for providing the test result to the high-level program.

1   10.   The software program of claim 9 wherein the high-level program is usable with a

2   plurality of different test systems without modification.

1   11.   The software program of claim 10 wherein all communications between the high-level

2   program and the low-level program are routed through the interface program.

1   12.   The software program of claim 10 wherein interface is unique to a specific test system.

1   13.   The software program of claim 12 wherein all communications between the high-level

2   program and the low-level program are routed through the interface program.

1   14.   The software program of claim 9 wherein interface is unique to a specific test system.

1   15.   The software program of claim 9 wherein all communications between the high-level

2   program and the low-level program are routed through the interface program.

1 16. The software program of claim 9 wherein the interface further includes computer

2 program code for converting one or more low-level codes from the low-level program to one or

3 more high-level codes that correspond to the functionality of the one or more low-level codes.

1 17. The software program of claim 16 wherein the interface further includes computer

2 program code for converting one or more high-level codes from the high-level program to one or

3 more low-level codes that correspond to the functionality of the one or more high-level codes.